

## III. AMENDMENTS TO THE CLAIMS: JC17 Rec'd PCT/PTO 14 JUN 2005

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

- 1-84. (Canceled)
85. (Original): A method of automated sample processing comprising the steps of: establishing an automated sample processing system having an automated process operation capability that causes automated process operation events through robotic sample process functions; scheduling a plurality of sample process operations; systematically storing important details of a significant number of said plurality of sample process operations as such sample process operations occur; automatically processing at least one sample at least in part through operation of said robotic sample process functions sequencing through said scheduled plurality of sample process operations; and accepting a prompt from a user to display at least a portion of said important details of a significant number of said plurality of sample process operations; and providing information relative to said plurality of sample process operations to at least one person.
86. (Original): A method of automated sample processing as described in claim 85 wherein said step of establishing an automated sample processing system having an automated process operation capability that causes automated process operation events through robotic sample process functions comprises the step of establishing an automated slide processing system.

87. (Original): A method of automated sample processing as described in claim 86 wherein said step of automatically processing at least one sample comprises the steps of:  
arranging a plurality of slides on a carrier retainment assembly;  
applying a reagent to said plurality of slides; and  
automatically staining said plurality of slides.

88. (Original): A method of automated sample processing as described in claim 87 wherein said step of establishing an automated sample processing system having an automated process operation capability that causes automated process operation events through robotic sample process functions comprises the steps of:  
establishing a plurality of automated slide stainlers; and  
electronically connecting said plurality of automated slide stainlers.

89. (Currently amended): A method of automated sample processing as described in claim 85, ~~87, or 88~~ and further comprising the step of establishing a local area network electronically connected to said automated sample processing system.

90. (Currently amended): A method of automated sample processing as described in claim 87 [[or 88]] and further comprising the step of holding said plurality of slides on at least one movable carrier retainment assembly.

91. (Original): A method of automated sample processing as described in claim 87 wherein said step of systematically storing important details of a significant number of said plurality of sample process operations as such sample process operations occur comprises the steps of:  
systematically storing time of occurrence data,  
systematically storing substance identifier data,  
systematically storing individual robotic movement data,  
systematically storing subject sample data, and  
systematically storing type of protocol data.

92. (Original): A method of automated sample processing as described in claim 85 wherein said step of systematically storing important details of a significant number of said plurality of sample process operations as such sample process operations occur comprises the step of systematically storing details selected from a group consisting of:  
time of occurrence data, number of occurrence data, part operation data, amount of usage data, amount of material used data, type of material used data, substance identifier data, individual movement data, robotic action data, individual robotic movement data, individual operation data, individual usage data, actual date data, actual time data, precise time data, relative time data, absolute time data, initiation time data, completion time data, subject sample data, sample image data, individual sample process data, individual slide log data, system image data, substance image data, and type of protocol data.

93. (Original): A method of automated sample processing as described in claim 85 wherein said step of systematically storing important details of a significant number of said plurality of sample process operations as such sample process operations occur comprises the step of systematically storing amount of material used data.

94. (Original): A method of automated sample processing as described in claim 92 wherein said step of systematically storing important details of a significant number of said plurality of sample process operations as such sample process operations occur comprises the step of systematically storing robotic action data.

95. (Original): A method of automated sample processing as described in claim 94 wherein said step of systematically storing important details of a significant number of said plurality of sample process operations as such sample process operations occur comprises the step of systematically storing individual robotic movement data.

96. (Original): A method of automated sample processing as described in claim 85 wherein said step of systematically storing important details of a significant number of said plurality of sample process operations as such sample process operations occur comprises the step of systematically storing precise time data.
97. (Original): A method of automated sample processing as described in claim 96 wherein said step of systematically storing important details of a significant number of said plurality of sample process operations as such sample process operations occur comprises the step of systematically storing relative time data.
98. (Original): A method of automated sample processing as described in claim 96 wherein said step of systematically storing important details of a significant number of said plurality of sample process operations as such sample process operations occur comprises the step of systematically storing absolute time data.
99. (Original): A method of automated sample processing as described in claim 85 wherein said step of systematically storing important details of a significant number of said plurality of sample process operations as such sample process operations occur comprises the step of systematically storing image data.
100. (Original): A method of automated sample processing as described in claim 99 wherein said step of systematically storing image data comprises the step of systematically storing sample image data.
101. (Original): A method of automated sample processing as described in claim 99 wherein said step of systematically storing image data comprises the step of systematically storing substance image data.

102. (Original): A method of automated sample processing as described in claim 99 wherein said step of systematically storing image data comprises the step of systematically storing system image data.
103. (Currently amended): A method of automated sample processing as described in claim 99, ~~100, 101, 102~~ wherein said step of systematically storing image data comprises the step of systematically storing multiple image data.
104. (Original): A method of automated sample processing as described in claim 103 wherein said step of systematically storing multiple image data comprises the step of systematically storing pre- and post-event image data.
105. (Original): A method of automated sample processing as described in claim 85 wherein said step of systematically storing important details of a significant number of said plurality of sample process operations as such sample process operations occur comprises the step of creating a segmented computer file.
106. (Original): A method of automated sample processing as described in claim 85 wherein said step of systematically storing important details of a significant number of said plurality of sample process operations as such sample process operations occur comprises the step of creating an inalterable computer record.
107. (Original): A method of automated sample processing as described in claim 106 wherein said step of creating an inalterable computer record comprises the step of creating integral change indicia as part of said inalterable computer record.
108. (Original): A method of automated sample processing as described in claim 85 wherein said step of systematically storing important details of a significant number of said plurality of sample process operations as such sample process operations occur comprises the step of creating a common format computer record.

109. (Original): A method of automated sample processing as described in claim 85 wherein said step of systematically storing important details of a significant number of said plurality of sample process operations as such sample process operations occur comprises the step of creating a proprietary format computer record.
110. (Original): A method of automated sample processing as described in claim 85 wherein said step of accepting a prompt from a user to display at least a portion of said important details of a significant number of said plurality of sample process operations comprises the step of providing a software selection to a user.
111. (Original): A method of automated sample processing as described in claim 85 wherein said step of accepting a prompt from a user to display at least a portion of said important details of a significant number of said plurality of sample process operations comprises the step of utilizing a remote access connection.
112. (Original): A method of automated sample processing as described in claim 85 wherein said step of providing information relative to said plurality of sample process operations to at least one person comprises the step of displaying at least a portion of said information.
113. (Original): A method of automated sample processing as described in claim 112 wherein said step of displaying at least a portion of said information comprises the step of remotely displaying at least a portion of said information.
114. (Currently amended): A method of automated sample processing as described in claim 85 ~~or 112~~—wherein said step of displaying at least a portion of said information comprises the step of real time displaying at least a portion of said information.

115. (Original): A method of automated sample processing as described in claim 112 wherein said step of displaying at least a portion of said information comprises the step of creating a simulated motion display from at least a portion of said information.
116. (Original): A method of automated sample processing as described in claim 85 wherein said step of providing information relative to said plurality of sample process operations to at least one person comprises the step of providing a sequential playback capability.
117. (Original): A method of automated sample processing as described in claim 116 wherein said step of providing a sequential playback capability comprises the step of providing an altered speed sequential playback capability.
118. (Original): A method of automated sample processing as described in claim 117 wherein said step of providing an altered speed sequential playback capability comprises the step of providing a user alterable speed sequential playback capability.
119. (Original): A method of automated sample processing as described in claim 117 wherein said step of providing an altered speed sequential playback capability comprises the step of providing a high speed sequential playback capability.
120. (Original): A method of automated sample processing as described in claim 85 wherein said step of systematically storing important details of a significant number of said plurality of sample process operations as such sample process operations occur comprises the step of systematically storing individual slide log data.
121. (Original): A method of automated sample processing as described in claim 85 and further comprising the step of real time displaying individual slide log data.

122. (Original): An automated sample processing system comprising:
  - at least one sample arranged on a carrier element;
  - a process operation control system configured to at least partially process said sample;
  - robotic motion system responsive to said process operation control system;
  - a multiple event scheduler to which said robotic motion system is at least in part responsive;
  - systematic process detail capture element;
  - a significant process detail memory responsive to said systematic process detail capture element and that stores at least some significant process data;
  - an information access prompt element to which said significant process data is responsive; and
  - a significant process data transfer element.
123. (Original): An automated sample processing system as described in claim 122 wherein said at least one sample arranged on a carrier element comprises a biological sample arranged on a slide.
124. (Original): An automated sample processing system as described in claim 123 wherein said process operation control system configured to at least partially process said sample comprises:
  - a plurality of slides on a carrier element retainment assembly;
  - at least one reagent container; and
  - a slide stain element configured to act upon said plurality of slides.
125. (Original): An automated sample processing system as described in claim 124 and further comprising:
  - a plurality of automated slide stainers; and
  - an electronic connection to said plurality of automated slide stainers.

126. (Currently amended): An automated sample processing system as described in claim 122, ~~124, or 125~~ and further comprising a local area network electronically connected to a stand alone automated slide processing system.
127. (Currently amended): An automated sample processing system as described in claim 124 ~~or 125~~ wherein said carrier element comprises a movable carrier element.
128. (Original): An automated sample processing system as described in claim 124 wherein said systematic process detail capture element comprises:
  - a time of occurrence data capture element,
  - an individual robotic movement data capture element,
  - a substance identifier data capture element,
  - a subject sample data capture element, and
  - a type of protocol data capture element.
129. (Original): An automated sample processing system as described in claim 122 wherein said systematic process detail capture element comprises a systematic process detail capture element selected from a group consisting of:
  - a time of occurrence data capture element, a number of occurrence data capture element, a part operation data capture element, an amount of usage data capture element, an amount of material used data capture element, a type of material used data capture element, a substance identifier data capture element, an individual movement data capture element, a robotic action data capture element, an individual robotic movement data capture element, an individual operation data capture element, an individual usage data capture element, an actual date data capture element, an actual time data capture element, a precise time data capture element, a relative time data capture element, an absolute time data capture element, an initiation time data capture element, a completion time data capture element, a subject sample data capture element, a sample image data capture element, an individual sample process data capture element, individual slide log

data capture element, a system image data capture element, a substance image data capture element, and a type of protocol data capture element.

130. (Original): An automated sample processing system as described in claim 122 wherein said systematic process detail capture element comprises an amount of material used data capture element.
131. (Original): An automated sample processing system as described in claim 129 wherein said systematic process detail capture element comprises a robotic action data capture element.
132. (Original): An automated sample processing system as described in claim 131 wherein said systematic process detail capture element comprises an individual robotic movement data capture element.
133. (Original): An automated sample processing system as described in claim 122 wherein said systematic process detail capture element comprises a precise time data capture element.
134. (Original): An automated sample processing system as described in claim 133 wherein said systematic process detail capture element comprises a relative time data capture element.
135. (Original): An automated sample processing system as described in claim 133 wherein said systematic process detail capture element comprises an absolute time data capture element.
136. (Original): An automated sample processing system as described in claim 122 wherein said systematic process detail capture element comprises an image data capture element.

137. (Original): An automated sample processing system as described in claim 136 wherein said image data capture element comprises a sample image data capture element.
138. (Original): An automated sample processing system as described in claim 136 wherein said image data capture element comprises a substance image data capture element.
139. (Original): An automated sample processing system as described in claim 136 wherein said image data capture element comprises a system image data capture element.
140. (Currently amended): An automated sample processing system as described in claim 136, ~~137, 138, or 139~~ wherein said image data capture element comprises a multiple image data capture element.
141. (Original): An automated sample processing system as described in claim 140 wherein said multiple image data capture element comprises a pre- and post-event image data capture element.
142. (Original): An automated sample processing system as described in claim 122 wherein said significant process detail memory comprises a segmented computer file memory element.
143. (Original): An automated sample processing system as described in claim 122 wherein said significant process detail memory comprises an inalterable computer record memory element.
144. (Original): An automated sample processing system as described in claim 143 wherein said significant process detail memory comprises an integral change indicia memory element.

145. (Original): An automated sample processing system as described in claim 142 wherein said significant process detail memory comprises a common format computer record memory element.
146. (Original): An automated sample processing system as described in claim 142 wherein said significant process detail memory comprises a proprietary format computer record memory element.
147. (Original): An automated sample processing system as described in claim 122 wherein said information access prompt element comprises a software selection element.
148. (Original): An automated sample processing system as described in claim 122 wherein said information access prompt element comprises a remote access element.
149. (Original): An automated sample processing system as described in claim 122 and further comprising a significant process detail information display that is responsive to said significant process detail memory.
150. (Original): An automated sample processing system as described in claim 149 wherein said significant process detail information display comprises a remote process detail information display.
151. (Currently amended): An automated sample processing system as described in claim 122 ~~or 149~~ wherein said significant process detail information display comprises a real time process detail information display.

152. (Original): An automated sample processing system as described in claim 149 wherein said significant process detail information display comprises a simulated motion process detail information display.
153. (Original): An automated sample processing system as described in claim 122 and further comprising a sequential playback element.
154. (Original): An automated sample processing system as described in claim 153 wherein said sequential playback element comprises an altered speed sequential playback element.
155. (Original): An automated sample processing system as described in claim 154 wherein said altered speed sequential playback element comprises a user alterable speed sequential playback element.
156. (Original): An automated sample processing system as described in claim 154 wherein said altered speed sequential playback element comprises a high speed sequential playback element.
157. (Original): An automated sample processing system as described in claim 122 wherein said systematic process detail capture element comprises an individual slide log data capture element.
158. (Original): An automated sample processing system as described in claim 122 and further comprising a real time individual slide log data display.